



Embodied Reflection of Images as an Arts-Based Research Method: Teaching Experiment in Higher Education

Jari Martikainen¹ · Anneli Hujala² · Sanna Laulainen²

Received: 3 June 2020 / Accepted: 18 November 2021 / Published online: 26 November 2021
© The Author(s) 2021

Abstract

This paper discusses a teaching experiment in which 20 university students in Finland participated in the course *Critical and Novel Approaches to Management and Organisational Studies*, which familiarized them with the method of embodied reflection of images. First, the paper presents the method and the teaching experiment. Then, it presents and discusses the students' experiences while experimenting with the method. The students' written reflections form the data of the study, which were analyzed qualitatively using content analysis. The findings of this small-scale study show that the method of embodied reflection of images provided students with a novel perspective into management and organization, fostered collaboration, and promoted critical thinking. In addition, rational knowledge was furnished with experiential and affective modes of knowledge. Based on students' positive feedback, the experiment succeeded in elucidating the method and its applicability in research on management and organization. This study promotes teaching arts-based research methods in higher education.

Keywords Arts-based method · Embodiment · Performance · Management · Organization · Research method · Teaching

Introduction

How do we teach research methods in management and organization studies in higher education? How do we integrate emotions and experiences into studies of organizational life? How do we provide students with opportunities to experiment with a variety of research methods and to develop an understanding of their practical applicability? How do we encourage and guide students to explore the potential of

✉ Jari Martikainen
jari.martikainen@uef.fi

¹ Department of Social Sciences, University of Eastern Finland, Kuopio, Finland

² Department of Health and Social Management, University of Eastern Finland, Kuopio, Finland

arts-based and embodied research methods, particularly when studying diverse matters related to management and organization? These are the questions we considered and sought to answer when teaching research methods as part of health and social management studies in higher education. Even though research methods are an integral part of management and organization studies in higher education and are being taught constantly, there is a lack of literature on how to teach research methodology in practice (Earley, 2014; Engbers, 2016; Massard de Fonseca & Segatto, 2021; Wagner et al., 2019). This was the research gap targeted in this study.

Prior research on teaching and learning research methods has shown that university students may find methodology courses challenging due to insufficient experience conducting research with abstract method principles, concepts, and processes (Howard & Brady, 2015; Lewthwaite & Nind, 2016). Methodology courses may also not always be well-integrated into the larger curriculum, which might contribute to difficulties in recognizing the relevance of these courses (Earley, 2014; Hoidn & Olbert-Bock, 2015; Massard de Fonseca & Segatto, 2021). In addition—and perhaps due to—the aforementioned reasons, students may have negative attitudes toward both research and research methodology courses (Arantes do Amaral & Lino dos Santos, 2018; Earley, 2014; Murtonen, 2015). Therefore, curriculum developers and teachers should develop pedagogical solutions that facilitate students' transference from the theoretical understanding of research methods to their practical application (Howard & Brady, 2015; Massard de Fonseca & Segatto, 2021; Nind & Lewthwaite, 2018).

Prior research has suggested that the methods of active learning, problem-based learning, cooperative learning, and experiential learning—which anchor the principles, concepts, and processes of research methods to concrete cases, practical procedures, and students' experiences—might motivate students to learn research methods and develop an understanding of their relevance (Earley, 2014; Hoidn & Olbert-Bock, 2015). These approaches are especially relevant in terms of teaching arts-based and embodied research methods and are the focus of this study. Referring to Leavy (2018), we understand arts-based research in this study as a research approach that uses art at some stage of the research to facilitate reflection. Referring to Snowber (2018), we understand embodiment as the “interconnection of body, mind, heart, imagination” (p. 249). Embodied research methods are a form of data production wherein participants engage in the research through bodily movement and then verbally reflect on the experiences generated by the bodily engagement (Thanem & Knights, 2019). In this paper, we call this procedure *embodied reflection*. Following Gray and Kontos (2015), we regard performance as a form of arts-based embodied inquiry that is based on creative movement.

This paper's overall aim is to present the embodied reflection of images method and an experiment in teaching it. The experiment was conducted at a Finnish university. The participants were master's-level students in social and health management who participated in a course titled *Critical and Novel Approaches to Management and Organisational Studies*. First, this article discusses arts-based and embodied research methods in management and organization studies. Then, it elaborates on the foundations of the method of embodied reflection of images, namely, the concept of the *cultural mirror* and performance as embodied reflection. This is followed

by a presentation of the experiment, in which 20 Finnish university students in the health and social management field applied the method in the framework of leadership and organization studies and reflected on their experiences in writing. Finally, the students' experiences of the method and trialing it are discussed in regard to arts-based methodology and research on organization and management.

Arts-Based and Embodied Research Methods

The limitations of verbal data and language-based methodologies in capturing the richness of organizational experiences have been recognized in recent management and organization research (e.g., Boxenbaum et al., 2018). In addition, it has been found that tacit layers of knowledge and experience often escape the vocabulary of discursive language (Leavy, 2018; Mannay, 2016). For this reason, recent management and organization research has amply developed and applied various arts-based methods (e.g., Armitage & Ramsay, 2020; Chemi & Du, 2018; Ward & King, 2020). The increase in the use of arts-based methods can be seen as part of a larger interest in material and visual (Bell et al., 2014; Boxenbaum et al., 2018)—as well as emotional and embodied—dimensions of matters and phenomena related to management and organization (Stowell & Warren, 2018; Toraldo et al., 2018). Simultaneously, the attempt to capture sensory and experiential aspects of organizational life reflects the recent biases in social sciences known as the material and visual turn (Bell et al., 2014; Boxenbaum et al., 2018), affective turn (Clough & Halley, 2007; Guy & Mastracci, 2018), and emotional turn (Lemmings & Brooks, 2014).

In addition to offering the research participants an alternative way (other than mere verbal reflection) to reflect on matters related to organization, arts-based methods are believed to provide them with a possibility to step away from the flow of everyday events and from their everyday attitudes (Leavy, 2018; Mannay, 2016). This novel position and mode of observing and reflecting organizational practices may lead participants to notice things they had taken for granted and may sharpen their critical reflection skills (Mannay, 2016; Martikainen, 2018a). Furthermore, the capacity of arts-based methods to appeal to emotions and lived experiences may involve participants in research in a more holistic manner, overcoming the dichotomies of reason vs. emotions and mind vs. body (Archibald & Blines, 2021; Leavy, 2018).

Arts-based research conducted in the field of management and organization studies includes a wide variety of approaches and materials, such as drawing and painting (e.g., Cheles & Sorlin, 2020; Martikainen, 2018a; Ward & King, 2020), photography, videos (e.g., LeBaron et al., 2018; Toraldo et al., 2018; Warren, 2018), creative movement, and dance (e.g., Biehl, 2017; Hujala et al., 2014, 2016; Springborg, 2020). In addition, researchers have extensively conducted performance-based embodied inquiries to study organizational interaction (Küpers, 2015, 2017; Sinclair & Ladkin, 2018; Thanem & Knights, 2019). Visual methodologies have occupied a prominent position within arts-based research. In addition to producing visual research data, participants can also produce verbal data based on reflection on visual material, such as paintings and media images (Klenke, 2014; Martikainen & Hujala,

2017). Thus, in prior research, visual materials have served both as data and as a source for producing verbal data. In addition, visual materials have been used as a means of representing and summarizing research findings (Leavy, 2018).

Meyer et al. (2013) distinguished five approaches to using images in organization research. In the archeological tradition, the aim is to reconstruct the meaning intended by the image maker. The performative tradition, in turn, studies how images are intertwined with organizational practices. The strategic tradition explores visual representations as a means of influencing audiences. In the dialogical tradition, images function as a means of communication with research participants. Finally, in the documenting tradition, images act as field notes evidencing phenomena related to organization.

Following Meyer et al.'s (2013) classification, this experiment uses images in a dialogical role with the aim of garnering insight into participants' thoughts and experiences on matters related to management and organization in general and organizational interaction in particular. Differing from the more common application of dialogical use of images, in which participants make images themselves (e.g., through photo elicitation; Warren, 2018), this study used images as a platform for embodied reflection.

Embodied Reflection of Images

In this study, we used embodied reflection of images as a research method in management and organization research. We consider it an arts-based and embodied research method with the potential to develop a more diversified understanding of organizational behavior and interaction than mere language-based research methods could achieve. In our approach, embodied reflection of images is a form of data production wherein participants plan and present a performance based on/inspired by an image related to the research topic. After presenting the performance, the participants reflected verbally on the experiences, notions, feelings, and emotions generated during the performance. In this section, we present the premises of the method—cultural mirror and performance as embodied reflection—and the pedagogical foundations of our teaching experiment.

Image as a Cultural Mirror

Recent research has argued that observing and reflecting on visual images may produce meaningful insights into issues related to social interaction and acting in various social roles and contexts, including management and organization (e.g., Acevedo, 2014; Cheles & Sorlin, 2020; Martikainen, 2020). This argument is based on the power of visual images to concretize the research topic by showing it visually and to appeal to lived experiences (Martikainen & Hujala, 2017). The perception of images—for instance, works of art—does not occur in a vacuum. Instead, people use their own experiences and cultural knowledge as a resource when making sense of images (Martikainen, 2020). Thus, the boundaries between the artistic and the social

become blurred. On the one hand, images appeal to, address, and activate resources inherent in the spectator; on the other hand, the experiences and cultural knowledge of the spectator provide a key for making sense of the images (Brinck, 2018; Kesner & Horáček, 2017; Steier et al., 2015).

The concepts of “mirror” and “mirroring” play an important role in the psychoanalytical tradition, most notably in Lacan’s (2006) mirror stage. However, this approach does not directly draw from psychoanalysis. Instead, the conceptualization of images as “cultural mirrors” (Martikainen, 2011) is based on the premise that in perception, images are inevitably set into relation with the perceivers’ thoughts and feelings, which promotes reflection. In this methodological design, the cultural mirror refers specifically to the perceivers’ heightened reflective stance generated by the image. Perceivers are not passive recorders of the external stimuli provided by images. On the contrary, they are regarded as active constructors of meanings activated by images, using their experiences and cultural knowledge as a resource for sense making (Brinck, 2018; Martikainen, 2011; Steier et al., 2015). Images as cultural mirrors invite spectators to partake in communicative reflection, in which the people, matters, and phenomena depicted in the images are set into dialogue with spectators’ conceptions of the depicted elements. In addition to familiar matters, images also visualize unfamiliar matters that may challenge perceivers’ conceptions, knowledge, and prior experiences. This negotiation between the image and perceivers’ lived experiences and cultural knowledge forms the basic premise of the concept of the cultural mirror (Martikainen, 2011, 2018b).

Performance as an Embodied Reflection of Images

Perception of images emphasizes the role of vision and visual elements as mediators of meanings. Despite the emphasis on vision, the process of sense making draws on experiences and knowledge based on other senses as well (Brinck, 2018; Kesner & Horáček, 2017). In addition to the multisensory character of vision itself, visual images have the potential to address not only multisensory but also more holistic modes of knowledge and experience, bridging the Cartesian divide between reason and emotion, mind and body, and consciousness and subconsciousness (Leavy, 2018). This kind of multidimensional knowledge, merging conceptual knowledge with lived experiences—as well as emotional, affective, sensory, and kinesthetic modes of knowledge—is understood as embodied knowledge (Berg, 2021; Duby & Parker, 2017; Reed, 2021).

Instead of observing the images only through vision, this study attempts to determine if collaborative performance based on images can diversify visual perception and serve as a means of embodied reflection. Performance has been conceptualized as a specific way of knowing and has been used in research as a form of embodied inquiry (Pelias, 2008; Scott, 2018; Snowber, 2016). In prior research, performance-based embodied inquiries have mostly meant practices in which participants have explored their experiences, memories, and feelings related to the subject matter through bodily movement (Pelias, 2008; Snowber, 2016). Deviating from this tradition, this experiment uses images as a starting point for performance-based

embodied inquiry. In other words, participants are invited to bring the images to life through their performances by adopting the roles of the characters in the images and interpreting them based on visual cues in the images as well as their own lived experiences and knowledge of management and organization.

The embodied knowledge constructed through performative practices is based on the employment of a “knowing, participatory, empathic, and political body” (Pelias, 2008, p. 186). Thus, performance is considered to combine cognitive and affective, as well as mental and embodied, modes of knowledge and experience (Gray & Kontos, 2015; Perry & Medina, 2015; Scott, 2018). In addition, it is thought to combine individual and social aspects of knowledge and experience because it is commonly based on interaction between the performers as well as between performers and audiences (Barton, 2017; Gill, 2008). This kind of multimodal and multidimensional knowledge may provide a more holistic conception of the research topic (Barton, 2017). In addition to being holistic, knowledge produced through performance is characterized as emergent; knowledge is, in the making, dependent on the performers’ interaction and situational construction of meaning (Gill, 2008; Grandi, 2021).

Pelias (2008) argued that empathy in terms of the “capacity to understand and share the feelings of others” (p. 187) is a central characteristic of embodied practices, such as performance. Thus, performance is understood to provide the performers with means of identifying themselves with the circumstances, thoughts, and feelings of other persons (Gray & Kontos, 2015). According to Pelias (2008), performers may use two strategies when taking on other people. On the one hand, they might try to imagine what they would do and feel in the circumstances of other people. On the other hand, they might attempt to “become others, adopting the characteristics of others as their own” (Pelias, 2008, p. 187). However, performers’ bodies are never neutral but rather carry biological, social, cultural, and political markers with them (Pelias, 2008; Sinclair & Ladkin, 2018). For this reason, the identification with the role of another person is always partial (Pelias, 2008), which might be one central precondition for the potential of performative inquiries to promote critical reflection and produce critical insights into the research topic. Nevertheless, embodied practices, such as performance, employ an empathic body characterized by the ability and willingness to coalesce with others, which forms the specific potential for performance as a research method (Pelias, 2008). Empathetic identification is also shown to take place when perceiving people and events in images (Kesner & Horáček, 2017).

In this study, performance is understood as a form of arts-based embodied inquiry that is based on creative movement (see Gray & Kontos, 2015). The special character of the performance in this experiment is that it used images as its starting point. The images depicting groups of people were designed to act as “organizational cases,” inviting participants to identify themselves with the people in the given circumstances. Taking the roles of the depicted people in the performance was thought to enable the participants to delve into those roles more deeply than through mere visual perception, since “by doing the actions called forth by a given role, the performer comes to a sense of what those actions entail” (Pelias, 2008, p. 187). Thus, the performance was regarded as a method of reflecting the image bodily, which, on

the one hand, activates empathic association with the people and events depicted in the image and, on the other hand, strengthens the involvement of lived experiences in the process of making sense of the images (Walsh, 2014). In addition, the design—in which performances were planned and performed collaboratively in groups—was thought to expand the interpretation of images from mere individual visual perception to collaborative embodied reflection. In this way, performance was thought to serve as an embodied reflection not only between the images and the participants' lived experiences but also between the performers themselves when responding to each other's acts, movements, and verbal utterances.

In this study, we understood embodied reflection as a process wherein the participants 1) co-created a performance/organizational case based on images, 2) used creative movement as a means of performing the organizational case and interacting in different organizational roles, and 3) reflected on the organizational case and experiences generated by this performance. Table 1 exemplifies the constituents/stages of the method as well as their order.

Why Teach the Embodied Reflection of Images Method in Higher Education?

Taking into account the development of arts-based research methods and their contribution to qualitative research in general and to research on management and organization in particular, it is obvious that teaching mere “traditional” language-based research methods in higher education is insufficient. Due to the increasing number of studies using creative movement, performance, and drama to study management and organization (Hujala et al., 2016; Springborg, 2020; Thanem & Knights, 2019), we regarded it as important that university students have a chance to familiarize themselves with this type of research methodology.

From the point of view of management and organization studies, we felt that the embodied reflection of images method might inform students about diverse emotions and experiences in organizational life that are often ignored or difficult to put into words. Both the visual and embodied practices included in the method are known for their potential to appeal to emotions and experiences. Similarly, Leavy (2018) argued that they may help research participants to become aware of their tacit experiences and habitual ways of thinking and acting. Hence, the embodied reflection of images method may diversify the contribution of more traditional and language-driven research methods and shed light on the layers of organizational life that are difficult to reach through verbal reflection only. For this reason, it is useful for students in higher education to experiment with diverse and non-mainstream research methods, including arts-based and embodied research methods.

Teaching the Method

The teaching experiment aimed to operationalize the research method's five stages in terms of a practical assignment. This was intended to concretize the stages and the transitions from one stage to another. Because prior research has indicated that students may have difficulties comprehending abstract concepts and processes when

Table 1 Summary of the stages in the method of embodied reflection

Researcher	Participants
1. Selection of the image related to the research topic	2. Visual observation of the image and construction of the subject matter of the image
	3. Creation of a plan for the performance based on the subject matter constructed through visual observation
	4. Performance as embodied reflection of the subject matter constructed from the image
	5. Oral or written reflection on thoughts, experiences, and feelings related to the research topic generated during the visual and performative reflection

detached from concrete cases and practical conduct (Howard & Brady, 2015; Lewthwaite & Nind, 2016), we designed the practical learning assignment to provide the students with a means of linking theory to practice.

The experiment was organized as part of the *Critical and Novel Approaches to Management and Organisational Studies* course for master's-level students in health and social management. The experiment was conducted in Finland. The objective of the course was to familiarize students with current theoretical and methodological approaches to management and organization studies and to help them develop skills to analyze these approaches critically. This year, the methods focused on embodiment: dance, creative movement, and performance.

Most of the students were adult students who had work experience in health care and social welfare organization. The authors of this paper were the teachers of the course. The course consisted of on-site lectures/workshops (16 h) and individual work/assignments in which students critically analyzed current research on management and organization.

The experiment took place during the autumn semester. During the last on-site workshop (4 h), the students were given the possibility to experiment with arts-based research methods based on reflection on images. The participants of the course (45 students altogether) could choose whether they wanted to do the reflection in writing, by drawing, or through performance. Twenty students volunteered to experiment with performance.

At the beginning of the session, some initial background information about arts-based research methods and performance was given. This was followed by the experiment with the reflection on images. After the practical experiment, students reflected on the experience individually and then collaboratively. At the end of the session, one of the teachers led the discussion on the forms, aims, and objectives of arts-based research methods. Students' reflections on the experiment were integrated into the discussion.

In this experiment, the students were shown four paintings depicting groups of people in diverse actions and settings (see Appendix). Because the purpose of the session was to provide the students the chance to experiment with embodied arts-based research methods in a limited time span, the teachers of the course had selected the paintings in advance. The paintings did not depict events in a work organization. However, the students were asked to relate the scenes depicted in the paintings to some phenomenon, issue, or theme related to management and/or organizational life. The unexpected visual starting point was intended to activate reflection, nourish creativity, and promote critical thinking (see Leavy, 2018). The assignment read: "Observe and reflect on the painting in the frame of management and organization. Prepare and present a performance based on your interpretation of the painting. Show in your performance what happens after the scene depicted in the painting."

The students were divided into groups of four to six participants. Each group was given a painting that they were asked to observe and reflect on as a depiction of an organizational event and to prepare a performance (maximum of five minutes) based on the painting. The participants could freely choose the mode of their performance, such as moving, dancing, acting, singing, or mimicking. The groups were

given 20 min to observe and reflect on the painting and plan the performance. The short time limit was designed to encourage the students to improvise and throw themselves into the performance without preparing all the details and occurrences in advance.

The groups performed their performances in the auditorium before other students who acted as the audience. After all groups had presented their performances, the students were asked to reflect on their performances and the experiences generated by them individually in writing. The writing served as a means of reflection and data production/feedback. We chose to collect the feedback in writing instead of conducting focus group interviews because we felt that the anonymity would encourage the students to share their views more truthfully. In addition, we believed this method of collecting the data would reduce the influence of other students' opinions. The written reflections formed the data for this study. In the instructions for the written reflections, we invited the students to reflect on the following topics: 1) the theme of the performance and how it related to management and organization, 2) the most important visual cues of the paintings influencing the performances, 3) whether the performances made students think of/realize any specific issue related to management and organization, 4) how the students experienced the experiment, and 5) the students' thoughts on embodied reflection of images as a research method. After the data collection, the same topics were reflected on collaboratively. Each group reflected on their performance and the experiences generated by it, and then other students and teachers had the chance to pose questions.

The pedagogical solutions were based on (social) constructivist and experiential learning theories, where students are regarded as active constructors of knowledge and skills (Beck & Kosnik, 2015; Kolb & Kolb, 2009; von Glaserfeld, 1995). In these theories, learning is a process in which students use their prior knowledge, skills, and experiences to construct their understanding of the study topics. Hence, these theories do not regard learning as a mere cognitive operation but acknowledge the contribution of emotions, experiences, and social relations to learning (Beck & Kosnik, 2015; Kolb & Kolb, 2009). These theoretical grounds for learning related to the entire assignment but most closely to Stages 2 and 3, in which the students made sense of the paintings using their prior knowledge and experiences of organizational life. Because the students co-created the case and performed it in groups, the pedagogical design was also based on collaborative learning (Miyake & Kirschner, 2014).

In requiring the students to create performances (Stage 4), the experiment leaned heavily on the tradition of learning by doing and experiential learning (Roberts, 2012), where mind and body, reason and emotion are regarded as intertwined learning "sites." Stage 5 focused on verbal reflections on the experiment and experiences generated during it. This type of reflective stance to action drew on Schön's (1987) conceptions of learning-in-action and reflection-in-action. The students were also encouraged to voice critical comments, which functioned as an opportunity to link the experiment to management and organization studies, prior knowledge and experiences, as well as situationally generated thoughts and emotions. The teaching arrangement guided the students to proceed from 1) visual observation of the image, to 2) planning the performance, to 3) gaining

experience through engaging in the performance, and, finally, to 4) reflecting on the experience. This echoes Whitehead's (1929/1969) conception of learning as a cyclic process consisting of different stages.

Method

Because the details about the participants, data, and data collection were provided in the section *Teaching the Method*, we only summarize the information briefly at this point. The participants were 20 students in a master's degree program in health and social management who were participating in a critical research methods course. They experimented with the research method and individually reflected on their experiences in writing. The written reflections formed the data for this study.

Since this study was interested in the characteristics and nuances of participants' thoughts and experiences, qualitative methodology provided an appropriate approach for it (Bogdan & Biklen, 2007; Denzin & Lincoln, 2018). For the same reason, it was important that the participants had the chance to reflect on their thoughts and experiences in their own words (Daher et al., 2017). To avoid other students' and teachers' influence on the contents of the data, the written data were produced individually before the collaborative reflection part of the experiment.

The data were analyzed using qualitative content analysis. Content analysis is a basic method of analysis that aims at developing an overview of the data and summarizing it (Cohen et al., 2018; Schreier, 2014). This is typically achieved by classifying the data (Krippendorff, 2013; Moser & Korstjens, 2018). Qualitative content analysis normally focuses on meanings and contents communicated by the data (Cohen et al., 2018; Schreier, 2014). The aforementioned five topics provided to facilitate the written reflection formed the basis for the analysis (see *Teaching the Method*). The analysis proceeded inductively (Daher et al., 2017) by focusing on identifying and classifying the topics the students brought up when answering the questions (Moser & Korstjens, 2018). In this process, we paid attention to word choice, sentences, and larger linguistic units.

Findings

In this section, we elaborate how students experienced the experiment with the embodied reflection of images method. The topics that students derived and constructed from the paintings are presented first. This is followed by a presentation of the students' experiences of the experiment as well as notions about the nature of the knowledge detected in the data. Finally, students' conceptions of embodied reflection of images as a research method are elaborated. Excerpts from the data in which students reflected on the experiment in writing are used to illustrate the findings.

Topics of Paintings and Performances

Each group was given a painting depicting a group of people. They were asked to reflect on the painting in the frame of management and/or organizational life and decide the topic of their performance based on their interpretations of the painting. The topics of the groups' performances are presented in the following.

The first group prepared a performance whose topic was group dynamics in an organizational meeting. They paid attention to and performed various roles that organization members take in organizational meetings, ranging from enthusiasm and innovation to resistance and withdrawal. Their critical reflection focused on manager–employee relations (painting 1).

The second group related their painting to the situation of co-operation negotiations, performing different types of employee behavior under the risk of getting fired. With their performance, the students reflected on the power, decision making, and responsibility of managers, as well as the responses of employees. In addition, group members reflected on gender-related issues critically (painting 2).

The third group reflected on the relationship between managers and employees from the perspective of blind obedience and following, asking whether organization members dare to challenge and object to the decisions made by managers. The members of the group paid critical attention to organizational hierarchy and authoritarian leadership (painting 3).

The performance of the fourth group dealt with job-related fatigue and how organization members respond to people suffering from work overload. The group raised critical questions regarding employee well-being and distribution of resources, and reflected on organizational responsibility and ethics (painting 4).

Embodied Reflection of Images Method Promoted Participation and Collaboration

The students participating in this study seemed to be motivated by the experiment and participated in observing the paintings, as well as making performances based on them, willingly. The discussion while observing the paintings and planning the performances was lively, and all the group members seemed to be involved in them. In the written reflections, the experiment was described as motivating and interesting, inviting students to think about management and organization in a novel way. The potential of paintings to generate diverse thoughts was experienced as rewarding, and students were interested in hearing each other's interpretations of the paintings and in discussing them. This seemed to diversify the discussion of the topic of the painting.

It was interesting to hear different thoughts generated by the painting. Good conversation. (student 1)

This experiment was fun. Every member of the group interpreted the painting in different ways. When you heard other members' interpretations, you saw the painting in a new light. (student 5)

Several students were of the opinion that observing the paintings and making performances based on them nourished collaboration and teamwork with previously unknown colleagues. When proceeding from each group member's observations and interpretations of the painting to performances, the students had to listen to each other and navigate between various ideas generated by the paintings. Mostly, collaboration was characterized as democratic, and each participant's views were appreciated. However, the opposite experience of collaboration was also detectable in the data when one participant stated that there was a clearly identifiable leader in their team strongly influencing their collaboration.

Paintings generated diverse thoughts, but we could construct a common view. (...) The interaction was fluent, too, with those with whom we had previously collaborated less. (student 2)

Leadership can be formed around a more powerful personality, as happened in our group and performance. The leader makes the group function the way s/he wants (...). The experiment was really instructive (...) and interesting as a research method. (student 14)

In addition to collaboration when observing the paintings and planning the performances, the act of performing itself was also experienced as a collaborative process. Because of the short time reserved for planning the performance in advance, the students had to improvise during the performance, observing each other and reacting to each other's actions and verbal expressions.

[This experiment] showed concretely the role of collaboration, listening to others, and interaction. It is liberating to improvise and not plan everything in advance. (student 7)

Collaborative observation of paintings and planning the performance seemed to promote collaboration and foster teamwork. It appeared that this kind of study design created a natural opportunity for collaboration. Diverse views and interpretations about the paintings that the participants shared with each other seemed to diversify and deepen both the observation of the paintings and the conceptions of the subject matter depicted in them. Except for one student, all the participants characterized the collaboration among the group members as democratic.

Embodied Reflection of Images Method Promoted Critical Thinking “Outside the Box”

Embodied reflection based on paintings and performances seemed to activate critical reflection, since written reports did not just describe the visual elements of the paintings and the plots of the performances, but pinpointed critical questions related to management and organizational life. Thus, embodied reflection of paintings seemed to form a platform for critically reflecting on the issues depicted in the paintings. As two students (student 2 and student 20) commented, the method of embodied reflection helped them to think “outside the box,” questioning the taken-for-granted assumptions.

Performance was a refreshing method and made me observe organizational life in a different way than in “normal situations”. (student 2)

I got the feeling that this method may help you to see things ‘outside the box’ and find surprising insights. (student 20)

It became evident that embodied reflection of paintings provided the students with a novel perspective on organizational issues, enabling them to reflect critically on management and organizational matters. The data revealed that the students attached the paintings to their own lived experiences of work life, current issues in Finnish society, and prior knowledge of management and organizations. In Finland, a large reform in the field of health and social care is taking place. Several students interpreted the paintings in the frame of this reform. Similarly, several students with prior work experience reflected on the paintings by combining their visual characteristics and their own experiences of work life.

In the work organization, there are also silent withdrawers who follow the more powerful ones. And there are always those who resist. And those who get enthusiastic. (...) Critics are very important. (...) The manager should not (...) eliminate resistance. (student 1)

It is important to listen to employees, so that exhausted workers can be helped in time. (...) I noticed that our own experiences influence interpretations, as well as prior knowledge (e.g., health and social care reform). (student 18)

Performance as embodied reflection seemed to reveal and concretize diverse and even contradictory aspects and interests related to various organizational roles. The students’ reflections suggested that the performances helped them to identify with the contradictory expectations that managers and other organizational members face, as well as to perceive problematic situations in a more multidimensional way, as shown by the following reflections on management.

We interpreted the painting so that a person in the organization uses power and others follow him blindly without thinking of the consequences. (...) It can also be that the manager himself is a tool of political decision-makers, for instance, and unconsciously performs their interests. (student 12)

Managers struggle with constant innovations as well, but at the same time they should be able to support all employees regardless of their views. (...)

The managers’ position is challenging: on one hand, they are supporters of employees and, on the other hand, representatives of the organization. (student 17)

The paintings depicting groups of people in contexts other than organizational settings, as well as the study design itself (based on visual observation and performance), seemed to provide students with an unusual position from which to reflect on management and/or organizational life. This seemed to sharpen and diversify the observation of management and organization, and also to promote critical thinking.

Students' Reflections on the Method and the Teaching Experiment

Students' written comments revealed that critical reflection did not focus on the subject matter of the paintings alone, but also embodied reflection as a research method. Most of the participants regarded embodied reflection as an interesting research method in terms of management and organization studies. Its promise as a research method was related to the potential of positioning the participants in a novel way to the subject matter. These participants regarded it as important in terms of critical thinking that taken-for-granted positions are shaken. In addition, the participants experienced embodied reflection as a method that activates the lived experiences of participants and encourages them to use these experiences when reflecting on the research topic. In terms of critical approach, the notion that one forms interpretations on research topics based on one's own experiences was regarded as important.

This experiment was outside my comfort zone, in a positive sense. A new kind of exercise. It is important to do things in a different way every now and then. The experiment contributed a pleasant experience of teamwork. (...) An interesting research method. (student 19)

A very mind-opening experiment on research methods capable of bringing out novel points of view. (student 16)

An interesting research method. This concretely showed that our own experiences and knowledge influence the way we interpret images. (student 18)

In addition, the experiment was described as fun. Planning the performance, in particular, was experienced as fun, generating bursts of laughter. The playfulness of the situation was regarded as forming and maintaining good team spirit. One student started to reflect on the role of humor in creative, innovative, and critical research.

This is not an easy research method (are there any easy research methods?).

In our group, humor played an important role. Does humor open the human mind so that there are no blocks ... perhaps it can promote critical reflection? (student 20)

Some students regarded this method as worth trying because not everyone is at their best when asked to reflect on research topics verbally. It was assumed that embodied reflection might deepen reflection and produce more authentic data for research. However, it was thought that the manner of the approach would depend on the research topic, as well as on the group of participants. Between the lines, one could derive the assumption that this kind of method would not work with all groups of participants.

As a research method (...) it might inform us more about participants' thoughts, because not everyone is capable of expressing themselves in writing. (student 5)

Performance can deepen the interpretation and bring authenticity. (...) The extent of the thoughtful reflection that this kind of method can produce depends on the participants and the topic of research. (student 10)

Some students regarded embodied reflection to be very challenging as a research method. They estimated that it could be difficult to recruit participants for this kind of research. In addition, it was thought that this kind of approach to research relies heavily on interpretation, which some participants regarded as problematic.

As a research method, [embodied observation] is interesting, but also challenging. Out of my personal comfort zone. It might be challenging to gather people willing to participate in this kind of research. (student 7)

As a research method, this includes quite a lot of interpretation at many stages. (student 7)

As a research method, embodied reflection of images was regarded as refreshing, inspiring, and interesting. Its capability to provide an alternative angle to reflect on leadership and organization was appreciated most. The multimodality of the method was also regarded as beneficial, because it might provide a means of getting in touch with knowledge and experiences that are difficult to put in words. However, students wondered whether participation in terms of performance might limit people's willingness to participate in such research. Furthermore, some participants doubted the relevance of the method because of its experiential and interpretational nature.

Discussion and Conclusions

The purpose of this paper was to present and discuss the teaching experiment with the embodied reflection of images method taught as part of a research methods course for master's program students in health and social management at a Finnish University. The paper focused on presenting the embodied reflection of images method, provided information on a teaching experiment using this method, and collected students' experiences of it. The findings of this small-scale study showed some preliminary outcomes regarding the relevance of the practice-based method of teaching embodied reflection of images in higher education (in the context of management and organization studies). The limited timeframe to conduct the experiment, small number of students, and small amount of data were obvious limitations of the study. The preliminary findings presented necessitate further examination, and we look forward to conduct further studies on the topic in the future.

This study explored students' experiences of experimenting with the embodied reflection of images method based on their written reflections. Even though verbal comments were necessary for the researcher to gather insight into participants' experiences, we do not assume that all the dimensions of knowledge and experience that were generated via embodied reflection of images were expressible in words (see Pelias, 2008; Chadwick, 2017). For this reason, it would be beneficial to videotape participant performances and combine researcher- and participant-driven observations with participant-driven reflections (see Gros, 2019; Jürgens & Fernandes, 2018). Clearly, this aspect of teaching must be developed further. In addition, it would be interesting to work with a larger group of participants to more closely explore the role and contributions of both the perception of an image and the performance in the construction of knowledge.

Embodied reflection using visual materials and performance clearly motivated the students to reflect on matters related to management and organization. A similar notion was previously made in existing literature on arts-based research methods (Eisner, 2008; Leavy, 2018; Martikainen & Hujala, 2017). Based on students' written comments, approaching management and organization through paintings and performances encouraged observation and reflection. The activated reflection, in turn, produced diverse interpretations of the paintings, which seemed to awaken genuine interest in fellow students' views on the paintings. As prior research has shown, the polysemous nature of images allows for multiple interpretations and encourages perceivers to project their lived experiences onto the matters depicted in the images (Eisner, 2008; Leavy, 2018). In addition, in this experiment, the participants were aware of how their own experiences were involved in making sense of the paintings.

The exercises based on the method of embodied reflection were carried out in groups. Naturally, this starting point in itself created affordances for collaboration. However, the findings of this study indicate that collaboration using visual and embodied modes of observation and reflection was actualized not merely as working together but also, and more importantly, as collaborative construction of meanings (see Butler-Kisber, 2010; Gray & Kontos, 2015). The findings also show that the group members felt that they genuinely contributed to the common project and experienced each other's contributions as meaningful. As literature on arts-based methods has shown, these methods often support and enable more democratic and authentic participation (Leavy, 2018).

Even though visual perception is not only based on visual experiences but also includes multimodal experiences (Brinck, 2018; Kesner & Horáček, 2017), performance concretely functioned as the principal mode of embodied reflection. When performing the roles of managers and employees identified in the paintings, students seemed to develop a more nuanced insight into problems related to these organizational roles. For instance, the students recognized the multiple and partly contradictory responsibilities of managers toward the organization and employees and that communicative fluency in an organization is a joint contribution of all its members. This recognition seemed to decrease the customary polarization between managers and employees, improving the students' understanding of organization-related dynamics.

The possibility of trying out these roles and performing them in response to fellow performers' actions and expressions seemed to contribute to a more nuanced understanding of organizational interaction. This finding is compatible with prior research and methodological literature pinpointing the potential of performance-based inquiries to deepen and diversify the understanding of a research topic (Barton, 2017; Gray & Kontos, 2017; Pelias, 2008). For this reason, the method of embodied reflection could lead to the production of nuanced information on participants' conceptions and experiences concerning the research topic (Snowber, 2018). Because of the experiential nature of embodied reflection, these kinds of data could produce ample material that challenges researchers' prior conceptions and activates their critical reflection (Botelho, 2020).

The ability of images and performances to concretize matters related to management and organization seemed to advance critical reflection as well. When students moved from observation of the visual qualities of paintings to constructing the subject matter and topics of their performances, they proceeded from description to meaning construction. As typical of performative inquiries (Botelho, 2020; Gray & Kontos, 2015), students adopted a critical stance toward the topic of research. The students used visual cues from the paintings, their lived experiences, and prior knowledge—as well as situational experiences generated by the performances—as a resource. With this resource, they developed a critical stance to management and organization, addressing issues they experienced as unjust, inappropriate, or unethical. It might be possible that the paintings used as inspiration for the performances provided students not only with a concrete starting point but also with a cultural mirror for their thoughts and experiences, heightening their critical stance (see Martikainen, 2011).

The choice of images forms a critical point of the method. Naturally, the choice of images affects which matters become selected as topics of reflection. In this way, the choice of images also influences the results. Through the selection of images, researchers can guide the participants to focus on certain aspects of management and organization. Despite the attempt to focus participants' reflection on desired topics, the polysemous nature of images (Eisner, 2008; Leavy, 2018) and the collaborative construction of meaning through performance (Pelias, 2008; Scott, 2018) create an affordance for the emergence of unexpected realizations, experiences, and emotions. Thus, embodied reflection of images might provide participants with means of spotting and voicing tacit and even silenced experiences related to management and organization. Even though the students did not criticize the design (in which teachers chose the images used as the basis for the performance), it may prove beneficial to develop methods where students themselves select the images. This would increase the self-determination of the students/participants and decrease the hierarchical relationship between teachers/researchers and students/participants.

Management and organization-related performances based on paintings clearly seemed to provide the students with the means of identifying themselves with the roles and problems of organizational life. These situational meanings, experiences, and feelings merged with students' lived experiences and prior knowledge of management, organization, and contemporary issues in Finnish society. Based on this finding, embodied observation is a worthy method when attempting to reach a more holistic insight into participants' conceptions and experiences of the research topic, which corresponds to the findings of previous studies (e.g., Butler-Kisber, 2010; Gray & Kontos, 2017; Pelias, 2008). Based on our study, this type of approach might provide an opportunity to capture experiential and embodied modes of knowing related to management and organization.

Last but not least, the students experienced the dimension of playful creativity inherent in embodied reflection (Küpers, 2017) as fun, refreshing, and rewarding. Even though it was assumed that not everyone would feel comfortable when participating in research using the method in question, the participants in this study found the experiment to be motivating and interesting. For some participants, the experiment even produced empowering experiences in terms of daring to step

outside their comfort zone. For them, the method served as an encouragement to use their senses and bodies as a means of delving into reflection. In addition, the possibility to improvise and act seemed to cultivate organizational imagination.

From the pedagogical perspective, this study's findings indicate that the students experienced the teaching and learning experiment positively. Because the practical, performance-based assignment concretized and operationalized the research method itself, the students had the chance to experiment with the method and reflect on its potential in management and organization studies based on their own experiences. Simultaneously, they were able to develop an understanding of how research participants in real cases might feel and what needs to be taken into consideration when using this methodology. In addition, performance functioned as an arena of collaborative meaning making and reflection, which further concretized the method's potential for studying organizational interaction. Finally, the experiment initiated critical thinking in terms of paying attention not only to the method's potential but also to its challenges and limitations. We hope the experiment increased students' awareness of research methodology and encouraged them to use research methods more diversely. Based on the students' active participation, lively discussion, and eagerness to hear each other's thoughts and experiences, the teaching experiment proved to be successful. The students were interested in arts-based research methods in general and performance in particular as a means of embodied reflection. It is obvious that one four-hour session was not enough to develop a deep understanding of the embodied reflection of images method. However, it succeeded in arousing the students' interest in familiarizing themselves with the method independently and experimenting with other arts-based methods as well. In the future, it would be interesting to arrange an optional course on arts-based research methods to provide students the chance to delve into them more profoundly.

In this study, we introduced the research method of embodied reflection of images and presented an experiment on teaching it. By elaborating the background and premises of this method, we elucidated and justified the pedagogical choices used in the teaching experiment and gave readers the tools for evaluating the appropriateness of these pedagogical choices. Based on the study results, we feel encouraged to develop further practice-based solutions in teaching research methods in higher education and hope this study will inspire other teachers to share and develop pedagogical solutions in teaching research methodology in management and organization studies.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s10780-021-09449-x>.

Author Contributions All authors contributed to the study conception and design. Material preparation, data collection and analysis were performed by JM, AH and SL. The first draft of the manuscript was written by JM and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

Funding Open access funding provided by University of Eastern Finland (UEF) including Kuopio University Hospital. No funding was received.

Availability of Data and Material Not applicable.

Code Availability Not applicable.

Declarations

Conflict of interest There are no conflicts of interest / competing interests that would affect the decision to publish the manuscript.

Ethical Approval This study was performed in line with the principles of the Declaration of Helsinki and the ethical principles of research with human participants and ethical review in the human sciences in Finland following the Finnish National Board on Research Integrity TENK guidelines 2019. These guidelines are in force since 1 October 2019. University of Eastern Finland Committee of Research Ethics follows these guidelines in the evaluation. Based on these guidelines no approval had to be obtained from the University of Eastern Finland Committee of Research Ethics.

Consent to Participate Informed consent has been obtained from all the research participants.

Consent for Publication Informed consent has been obtained from all the research participants to publish parts of data in the study. All the authors approve the version to be published and agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Acevedo, B. (2014). Portraiture and the construction of “charismatic leadership.” In E. Bell, S. Warren, & J. Schroeder (Eds.), *The Routledge companion to visual organization* (pp. 116–129). Routledge.
- Aranes do Amaral, J. A., & Lino dos Santos, R. J. R. (2018). Combining project-based learning and community-based research in a research methodology course: *The lessons learned*. *International Journal of Instruction*, 11(1), 47–60. <https://doi.org/10.12973/iji.2018.11114a>
- Archibald, M., & Blines, J. (2021). Metaphors in the making: Illuminating the process of arts-based health research through a case exemplar linking arts-based, qualitative and quantitative research data. *International Journal of Qualitative Methods*. <https://doi.org/10.1177/1609406920987954>
- Armitage, A., & Ramsay, D. (2020). A poetic approach to researching silence in organisations. In J. Ward & H. Shortt (Eds.), *Using arts-based research methods. Creative approaches for researching business, organisation and humanities* (pp. 209–236). Palgrave Macmillan.
- Barton, B. (2017). Introduction. Wherefore PAR? Discussions on a “life of flight.” In A. Arlander, R. Barton, M. Dreyer-Lude, & B. Spatz (Eds.), *Performance as research* (pp. 1–19). Routledge.
- Beck, C., & Kosnik, C. (2015). *Innovations in teacher education*. State University of New York Press.
- Bell, E., Warren, S., & Schroeder, J. (2014). *The Routledge companion to visual organization*. Routledge.
- Berg, T. (2021). Kinesthetic dialogue: The “hands-off” transmission of embodied knowledge through silent dance pedagogy. *Journal of Dance Education*. <https://doi.org/10.1080/15290824.2021.1941976>

- Biehl, B. (2017). *Dance and organisation*. Routledge.
- Bogdan, R., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theories and methods*. Allyn and Bacon.
- Botelho, N. (2020). Reflection in motion: An embodied approach to reflection on practice. *Reflective Practice: International and Multidisciplinary Perspectives*, 22(2), 147–158. <https://doi.org/10.1080/14623943.2020.1860926>
- Boxenbaum, E., Jones, C., Meyer, R. E., & Svejenova, S. (2018). Towards an articulation of the material and visual turn in organization studies. *Organization Studies*, 33(5–6), 597–616. <https://doi.org/10.1177/0170840618772611>
- Brinck, I. (2018). Empathy, engagement, entertainment: The interaction dynamics of aesthetic experience. *Cognitive Processing*, 19(2), 201–213. <https://doi.org/10.1007/s10339-017-0805-x>
- Butler-Kisber, L. (2010). *Qualitative inquiry. Thematic, narrative and arts-informed perspectives*. Sage.
- Chadwick, R. (2017). Embodied methodologies: Challenges, reflections and strategies. *Qualitative Research*, 17(1), 54–74. <https://doi.org/10.1177/1468794116656035>
- Cheles, L., & Sorlin, P. (2020). Introduction: Faces of politics. In L. Cheles & A. Giasone (Eds.), *The political portrait. Leadership, image and power* (pp. 1–26). London: Routledge.
- Chemi, T., & Du, X. (2018). *Arts-based methods and organizational learning*. Palgrave Macmillan.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education*. Routledge.
- Clough, P. T., & Halley, J. (Eds.). (2007). *The affective turn: Theorizing the social*. Duke University Press.
- Daher, M., Carré, D., Jaramillo, A., Olivares, H., & Tomcic, A. (2017). Experience and meaning in qualitative research: A conceptual review and a methodological device proposal. *Forum: Qualitative Social Research*, 18(3), 1–24. <https://doi.org/10.17169/fqs-18.3.2696>
- Denzin, N. K., & Lincoln, Y. S. (2018). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 1–26). Sage.
- Duby, M., & Parker, P. A. (2017). Deterritorializing the research space: Artistic research, embodied knowledge, and the academy. *SAGE Open*, 7(4), 1–9. <https://doi.org/10.1177/2158244017737130>
- Earley, M. A. (2014). A synthesis of the literature on research methods education. *Teaching in Higher Education: Critical Perspectives*, 19(1), 242–253. <https://doi.org/10.1080/13562517.2013.860105>
- Eisner, E. (2008). Art and knowledge. In J. G. Knowles & A. C. Cole (Eds.), *Handbook of the arts in qualitative research. Perspectives, methodologies, examples, and issues* (pp. 3–12). London: Sage.
- Engbers, T. A. (2016). Comparative research: An approach to teaching research methods in political science and public administration. *Teaching Public Administration*, 34(3), 270–283. <https://doi.org/10.1177/0144739416640850>
- Gill, S. P. (2008). Knowledge as embodied performance. In S. P. Gill (Ed.), *Cognition, communication and interaction. Transdisciplinary perspectives on interactive technology* (pp. 3–30). Springer.
- Grandi, G. L. (2021). Theatre as method: Performance creation through action research. *Action Research*. <https://doi.org/10.1177/1476750321993530>
- Gray, J., & Kontos, P. (2015). Immersion, embodiment, and imagination: Moving beyond an aesthetic of objectivity in research-informed performance in health. *Forum: Qualitative Social Research*, 16(2), 1–17. <https://doi.org/10.17169/fqs-16.2.2288>
- Gros, N. O. (2019). Carrying the nest: (Re)writing history through embodied research. *Journal of Embodied Research*, 2(1), 3(23.30). <https://doi.org/10.16995/jer.23>
- Guy, M. E., & Mastracci, S. H. (2018). Making the affective turn: The importance of feelings in theory, praxis, and citizenship. *Administrative Theory & Praxis*, 40(4), 281–288. <https://doi.org/10.1080/10841806.2018.1485455>
- Hoidn, S., & Olbert-Bock, S. (2015). Learning and teaching research methods in management education. *The International Journal of Educational Management*, 30(1), 46–62. <https://doi.org/10.1108/IJEM-08-2014-0117>
- Howard, C., & Brady, M. (2015). Teaching social research methods after the critical turn: Challenges and benefits of a constructivist pedagogy. *International Journal of Social Research Methodology*, 18(5), 511–525. <https://doi.org/10.1080/13645579.2015.1062625>
- Hujala, A., Laulainen, S., & Kokkonen, K. (2014). Manager's dance: Reflecting management interaction through creative movement. *International Journal of Work Organization and Emotion*, 6(1), 40–57. <https://doi.org/10.1504/IJWOE.2014.059431>
- Hujala, A., Laulainen, S., Kinni, R.-L., Kokkonen, K., & Puttonen, K. (2016). Dancing with the bosses: Creative movement as a method. *Organizational Aesthetics*, 5(1), 11–36.

- Jürgens, S., & Fernandes, C. (2018). Visualizing embodied research: Dance dramaturgy and animated infographic films. *Journal of Embodied Research*, 1(1), 3 (27:41). <https://doi.org/10.16995/jer.4>
- Kesner, L., & Horáček, J. (2017). Empathy-related responses to depicted people in art works. *Frontiers in Psychology*, 8, 1–16. <https://doi.org/10.3389/fpsyg.2017.00228>
- Klenke, K. (2014). Sculpting the contours of the qualitative landscape of leadership research. In D. V. Day (Ed.), *The Oxford handbook of leadership and organization* (pp. 118–145). Oxford University Press.
- Kolb, A. Y., & Kolb, D. A. (2009). Experiential learning theory: A dynamic, holistic approach to management learning, education and development. In S. J. Armstrong & C. V. Fukami (Eds.), *The Sage handbook of management learning, education and development* (pp. 42–68). Sage.
- Krippendorff, K. (2013). *Content analysis*. Sage.
- Küpers, W. (2015). *Phenomenology of the embodied organization*. Springer.
- Küpers, W. (2017). Inter-Play(ing)—Embodied and relational possibilities of serious play at work. *Journal of Organizational Change Management*, 30(7), 993–1014. <https://doi.org/10.1108/JOCM12-2016-0267>
- Lacan, J. (2006). *Écrits: The first complete edition in English*. W.W. Norton & Co.
- Leavy, P. (2018). Introduction to arts-based research. In P. Leavy (Ed.), *Handbook of arts-based research* (pp. 3–21). The Guilford Press.
- LeBaron, C., Jarzabkowski, P., Pratt, M. G., & Fetzer, G. (2018). An introduction to video methods in organizational research. *Organizational Research Methods*, 21(2), 239–260. <https://doi.org/10.1177/1094428117745649>
- Lemmings, D., & Brooks, A. (2014). The emotional turn in the humanities and social sciences. In D. Lemmings & A. Brooks (Eds.), *Emotions and Social Change: Historical and sociological perspectives* (pp. 31–38). Routledge.
- Lewthwaite, S., & Nind, M. (2016). Teaching research methods in the social sciences: Expert perspectives on pedagogy and practice. *British Journal of Educational Studies*, 64(4), 413–430. <https://doi.org/10.1080/00071005.2016.1197882>
- Mannay, D. (2016). *Visual, narrative and creative research methods. Application, reflection and ethics*. London: Routledge.
- Martikainen, J. (2011). *Käsittävä taidehistoria. Kuvalähtöinen malli taidehistorian opetukseen kuvalisen ilmaisun ammatillisessa perustutkinnossa. (Grasping art history. A picture-based model for teaching art history in vocational basic degree in visual arts)*. Doctoral dissertation. University of Jyväskylä, Finland. <https://jyx.jyu.fi/handle/123456789/36588>
- Martikainen, J. (2018a). The promise of visual approaches in organizational and management research. In W. Thomas, A. Hujala, S. Laulainen, & R. McMurray (Eds.), *The management of wicked problems in health and social care* (pp. 235–249). Routledge.
- Martikainen, J. (2018). Art history as a dialogue: Drawing, painting, and sculpting as educational navigation between the present and the past. *The International Journal of Arts Education*, 13(3), 1–12. <https://doi.org/10.18848/2326-9944/CGP/v13i03/1-12>
- Martikainen, J. (2020). How students categorize teachers based on visual cues. Implications of nonverbal communication for classroom management. *Scandinavian Journal of Educational Research*, 64(4), 569–588. <https://doi.org/10.1080/00313831.2019.1595713>
- Martikainen, J., & Hujala, A. (2017). Johtajuuden visuaaliset kategoriat (Visual categories of leadership). *Sosiologia*, 54(1), 43–62.
- Massard da Fonseca, E., & Segatto, C. (2021). Teaching qualitative research methods in political science: Does one size fits all? *Journal of Political Science Education*, 17(3), 493–501. <https://doi.org/10.1080/15512169.2019.1656081>
- Meyer, R., Höllerer, M. A., Jancsary, D., & van Leeuwen, T. (2013). The visual dimension in organizing, organization, and organization research: Core ideas, current developments, and promising avenues. *Academy of Management Annals*, 7, 489–555. <https://doi.org/10.1080/19416520.2013.781867>
- Miyake, N., & Kirschner, P. A. (2014). The social and interactive dimensions of collaborative learning. In K. R. Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (pp. 418–438). Cambridge University Press.
- Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European Journal of General Practice*, 24(1), 9–18. <https://doi.org/10.1080/13814788.2017.1375091>
- Murtonen, M. (2015). University students' understanding of the concepts of empirical, theoretical, qualitative and quantitative research. *Teaching in Higher Education*, 20(7), 684–698. <https://doi.org/10.1080/13562517.2015.1072152>

- Nind, M., & Lewthwaite, S. (2018). Hard to teach: Inclusive pedagogy in social science research methods education. *International Journal of Inclusive Education*, 22(1), 74–88. <https://doi.org/10.1080/13603116.2017.1355413>
- Pelias, R. (2008). Performative inquiry. Embodiment and its challenges. In J. G. Knowles & A. L. Cole (Eds.), *Handbook of the arts in qualitative research. Perspectives, methodologies, examples, and issues* (pp. 185–193). Sage.
- Perry, M., & Medina, C. (2015). Introduction. Working through the contradictory terrain of the body in qualitative research. In M. Perry & C. Medina (Eds.), *Methodologies of the embodiment. Inscribing bodies in qualitative research* (pp. 1–13). Routledge.
- Reed, D. J. (2021). Situating embodied instruction—proxemics and body knowledge. *Linguistics Vanguard*. <https://doi.org/10.1515/lingvan-2020-0131>
- Roberts, J. W. (2012). *Beyond learning by doing: Theoretical currents in experiential education*. Routledge.
- Schön, D. (1987). *Educating the reflective practitioner*. Jossey-Bass Publishers.
- Schreier, M. (2014). Qualitative content analysis. In U. Flick (Ed.), *The Sage handbook of qualitative data analysis* (pp. 170–183). Sage.
- Scott, J.-A. (2018). *Embodied performance as applied research, art and pedagogy*. Springer.
- Sinclair, A., & Ladkin, D. (2018). Writing through the body: Political, personal, practical. In C. Cassell, A. L. Cunliffe, & G. Grandy (Eds.), *The Sage handbook of qualitative business and management research methods* (pp. 415–428). Sage.
- Snowber, C. (2016). *Embodied inquiry. Writing, living and being through the body*. Sense Publishers.
- Snowber, C. (2018). Living, moving, and dancing. Embodied ways of inquiry. In P. Leavy (Ed.), *Handbook of arts-based research* (pp. 247–266). New York: The Guilford Press.
- Springborg, C. (2020). Designing dance into qualitative research. In J. Ward & H. Shortt (Eds.), *Using arts-based research methods. Creative approaches for researching business, organisation and humanities* (pp. 41–74). Palgrave Macmillan.
- Steier, R., Pierroux, P., & Krange, I. (2015). Embodied interpretation: Gesture, social interaction, and meaning making in a national art museum. *Learning, Culture and Social Interaction*, 7, 28–42. <https://doi.org/10.1016/j.lcsi.2015.05.002>
- Stowell, A., & Warren, S. (2018). The institutionalisation of suffering: Embodied inhabitation and the maintenance of health and safety in e-waste recycling. *Organization Studies*, 39(5–6), 791–815. <https://doi.org/10.1177/0170840617750693>
- Thanem, T., & Knights, D. (2019). *Embodied research methods*. Sage.
- Toraldo, M. L., Islam, G., & Mangia, G. (2018). Modes of knowing: Video research and the problem of elusive knowledges. *Organizational Research Methods*, 21(2), 438–465. <https://doi.org/10.1177/1094428116657394>
- Von Glaserfeld, E. (1995). A constructivist approach to teaching. In L. P. Steffe & J. E. Gale (Eds.), *Constructivism in education* (pp. 3–15). Lawrence Erlbaum.
- Wagner, C., Kawulich, B., & Garner, M. (2019). Mixed research synthesis of literature on teaching qualitative research methods. *SAGE Open*, 9(3), 1–18. <https://doi.org/10.1177/2158244019861488>
- Walsh, P. (2014). Empathy, embodiment, and the unity of expression. *Topoi*, 33(1), 215–226. <https://doi.org/10.1007/s11245-013-9201-z>
- Ward, J., & King, D. (2020). Drawing out emotion in organisational life. In J. Ward & H. Shortt (Eds.), *Using arts-based research methods. Creative approaches for researching business, organisation and humanities* (pp. 15–40). Palgrave Macmillan.
- Warren, S. (2018). Photography in organizational research. Conceptual, analytical and ethical issues in photo-elicitation inspired methods. In C. Cassell, A. L. Cunliffe, & G. Grandy (Eds.), *The Sage handbook of qualitative business and management research methods: Methods and challenges* (pp. 239–261). Sage.
- Whitehead, A. N. (1929/1969). *The aims of education and other essays*. The Free Press.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.